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ABSTRACT

The project taught mothers to apply behavior modification techniques to their mentally retarded children's behaviors. Subjects were 16 trainable retarded children (mean MA 4.3 years, mean CA 5 years), living at home, and their mothers, who were randomly assigned to experimental (E) or control (C) groups. C mothers were told to ask their children to obey them, but received no modification training. E mothers underwent 9 days of laboratory training in elicitation of obedience using behavior modification techniques with a 100% reinforcement schedule, followed by 6 months of using the techniques at home to encourage obedience and shape responses. Evaluation showed that E mothers applied correct reinforcements more often (p less than .01) and elicited appropriate responses in their children more frequently (p less than .01) than did C mothers. In addition, E mothers continued to elicit obedience on command and successfully shaped responses in their children other than obedience, with schedules of partial reinforcement. (KW)



Teaching Mothers to Use Behavior Modification Techniques with their Mentally Retarded Children

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The major thrust of this project was to find a way of using a good idea, behavior modification in every day life, with people who have a real stake in its success; mothers of retarded children. We all know that principles of behavior modification are workable with mentally retarded children in the laboratory and in institutions. In the hands of professionals and semi-professionals, we see that these techniques produce satisfying behavioral changes. We also recognize that, to see results, the person using modification procedures must train carefully for the job. He must invest considerable time, personal interest and energy in his efforts. And, he must work continually and consistently with his subject, often for long periods of time without obvious improvement.

These problems detract considerably from the potential value of modification techniques and lead some educators to dismiss them as interesting but not practical in daily life. Even well-done studies of modification techniques often refer only to one or two target behaviors observed over relatively short intervals. In addition, their value for mentally defective children living



with their own families is not often clear. Since behavior modification has so much promise, in theory, for improving the lives of the retarded, it is reasonable to ask how the researcher can extend and economize these procedures for the benefit of non-institutionalized children.

One neat and rather obvious solution is to teach mothers to apply the techniques to their own children's behaviors in the course of every day contacts. This approach puts control in the hands of people who may be more motivated than anyone else to seek change in behaviors of defective children. It is inexpensive and provides a built-in monitor of progress. From a research point of view, it has the added advantages of permitting long-term use operant techniques with multiple behavior problems.

A sample of 16 trainable retarded children, living with their families, and their mothers participated in this study. The children had a mean C.A. of 5 years, and a mean M.A. of 4.3 years, and were randomly assigned in equal proportions to one of two groups. The mothers of the children in one group were trained to use behavior modification techniques; the remaining mothers and their children served as a control group and received no modification training. They were told by the experimenter to ask their children to obey them, and they were given attention and support throughout the study.



-2-

The study included 2 phases: daily laboratory training of experimental-group mother-child pairs to show mothers how to elicit obedience in their children by using behavioral modifidation techniques with a 100 per-cent reinforcement schedule. The reinforcements consisted of M & M candy, praise (positive) and withdrawal of candy, ignoring or restraining the child (negative). This phase continued over one baseline day and 9 training days in a one-way observation room. Initially, an experimenter instructed each mother to differentially reinforce obedience responses in her child at 3 minute intervals. After 5 days of training, each mother differentially reinforced her own child without instruction.

In phase 2, each mother used modification techniques in her own home to encourage obedience and to shape responses she selected in her child. This phase continued for 6 months, during which time each mother-child was observed using these procedure in a laboratory at bi-monthly intervals.

The children attended classes operated by a private school for handicapped persons: Little Friends-Sheltered Workshop, Inc., Naperville, Illinois. The mothers volunteered to participate in the study.

Two dependent variables were analyzed by means of separate



analyses of variance with co-variance controls (phase of training, C.A. and M.A.). These variables were the number of correct presentations of reinforcements by mothers in both treatment groups and the number of times each correct presentation coincided with an appropriate response by the child. Relative to mothers in the control group, those mothers who received behavior modification training applied correct reinforcements more often (p<.01), and elicited appropriate responses in their children more frequently (p<01). Analyses of these behaviors by means of Hotellings T2 procedures for repeated measurements over the 6-month follow-up period yielded similar findings. In addition, mothers in the experimental group continued to elicit obedience on command, and successfully shaped a number of responses in their children other than obedience, with schedules of partial reinforcement. These responses included playing cooperatively with siblings, eating with table utensils, putting toys away, and so on.

These data, while based on a very limited sample, imply that mothers can successfully shape multiple behaviors in their own mentally retarded children after training in the use of behavior modification techniques. One problem encountered in

the study was the lack of confidence with which mothers approached their ability to use their training. In the laboratory, most of the children responded immediately and appropriately to the reinfor-The mothers took more time to be convinced of the value of modification techniques. They did, however, gain confidence as they continued, with periodic telephone calls from experimenters to support them. As the training program is relatively quick and inexpensive, it could be developed and used on a widespread basis with a minimum of funds and professional supervision. proves feasible, this kind of program could assist in the develoment of large numbers of mentally handicapped children living at home, for whom close professional supervision is not available. It has the added advantage of actively involving mothers in the behavioral growth of their own children. This aspect of the program alone could facilitate the adjustment of both mothers and children.